Appl. No.: 09/826,697

Reply to Office Action of October 5, 2005

Amendment

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend claims 1, 10, 16, and 20, without prejudice.

1. (Currently Amended) A method of testing [[the]] <u>a</u> Quality of Service (QoS) of voice transmissions in a voice-over-IP network path comprising:

performing a diagnostic procedure to identify one or more possibly faulty components among a plurality of network resources that reside in a plurality of transmission paths;

determining a path of the plurality of transmission paths from a VoIP client to a destination node, the path including at least one of the one or more possibly faulty components identified by the diagnostic procedure;

sending transmitting a digital audio file from the VoIP client to the destination node through the determined path;

measuring characteristics of the digital audio file at the destination node to analyze the QoS of the transmission; and

determining if one of the one or more possibly faulty components in the determined path is faulty.

- 2. (Previously Amended) The method of claim 1 further comprising polling at least one of the one or more possibly faulty components for status information.
- 3. (Previously Amended) The method of claim 2 further comprising generating a call history of at least one of the one or more possibly faulty components based on the status information.
- 4. (Previously Amended) The method of claim 1 further comprising repeating the sending.

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- 5. (Previously Amended) The method of claim 1 further comprising repeating the sending, measuring, and determining.
- 6. (Original) The method of claim 1 wherein the digital audio file is a WAV file.
- 7. (Previously Amended) The method of claim 1 wherein at least one of the one or more possibly faulty components is a software client.
- 8. (Previously Amended) The method of claim 1 wherein at least one of the one or more possibly faulty components is a hardware module.
- 9. (Previously Amended) The method of claim 1 further comprising generating a call history of at least one of the one or more possibly faulty components based on the measuring of the digital audio file at the destination node.
- 10. (Currently Amended) A voice-over-IP network comprising:
 - a plurality of network resources;
 - a source node selected from the plurality of network resources;
 - a destination node selected from the plurality of network resources;
- a test tool capable of performing a diagnostic procedure to identify one or more possibly faulty components among the plurality of network resources that reside within a plurality of transmission paths between the source node and the destination node;

a determined path connecting the source node through at least one or more of the identified possibly faulty components to the destination node; and

an analyzer connected to the destination node to measure characteristics of a digital audio file received by the destination node and determine if one or more of the one or more possibly faulty components among the plurality of network resources that reside within a plurality of transmission paths between the source node and the destination node is faulty.

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- 11. (Original) The network of claim 10 wherein the digital audio file is contained in a digital audio store.
- 12. (Previously Amended) The network of claim 10 wherein the test tool is accessible by the source node to poll the component for status information.
- 13. (Previously Amended) The system of claim 10 wherein at least one or more of the possibly faulty components among the plurality of network resources is a software client.
- 14. (Previously Amended) The system of claim 10 wherein at least one or more of the possibly faulty components among the plurality of network resources is a hardware module.
- 15. (Original) The system of claim 10 wherein the digital audio file is a way file.
- 16. (Currently Amended) A computer program product residing on a computer readable medium, the computer program comprising instructions that cause the computer to:

perform a diagnostic procedure to identify one or more possibly faulty components among a plurality of network resources that reside in a transmission path;

determine a path from a VoIP client to a destination node, wherein the path includes the one or more possible possibly faulty components identified by the diagnostic procedure;

send transmit a digital audio file from the VoIP client to the destination node through the determined path;

measure characteristics of the digital audio file to analyze the QoS a Quality of Service (QoS) of the transmission; and

determine if one of the one or more possibly faulty components is faulty.

17. (Previously Amended) The computer program product of claim 16 wherein at least one of the one or more possibly faulty components is a software client.

- 18. (Previously Amended) The computer program product of claim 16 wherein at least one of the one or more possibly faulty components is a hardware module.
- 19. (Original) The computer program product of claim 16 wherein the digital audio file is a way file.
- 20. (Currently Amended) A computer program product residing on a computer readable medium comprises instructions that cause the computer to:

perform a diagnostic procedure to identify one or more possibly faulty components among a plurality of network resources that reside in a transmission path;

determine a path from a VoIP client to a destination node, wherein the path includes the one or more possible faulty components identified by the diagnostic procedure; <u>and</u>

send a digital audio file from the VoIP client to the destination node through the determined path.

- 21. (Previously Amended) The computer program product of claim 20 wherein at least one or more of the possibly faulty components among the plurality of network resources is a software client.
- 22. (Previously Amended) The computer program product of claim 20 wherein at least one or more of the possibly faulty components among the plurality of network resources is a hardware module.
- 23. (Original) The computer program product of claim 20 wherein the digital audio file is a way file.
- 24. (Previously Presented) The method of claim 1, further comprising recording the digital audio file at the destination node and wherein measuring characteristics of the digital audio file at the destination node comprises measuring characteristics of the recording.

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25. (Previously Presented) The method of claim 1, wherein determining if one of the one or more possibly faulty components in the determined path is faulty comprises routing the digital audio file around at least one of the one or more possibly faulty components and determining if a change in the QoS of the voice transmission exists.

26. (Previously Presented) The computer program product of claim 20, wherein the readable medium further comprises instructions that cause the computer to poll at least one of the one or more possibly faulty components for status information.